

Applicant: Soto, et al.
US\$N: 09/512,581

Remarks

Applicants thank the Examiner for meeting with Applicants' representative August 13, 2004, and for his helpful comments.

Claims 1-2, 5, 8-12, 47-48, and 68 are pending upon entry of this Response. Claims 4 and 69 are here canceled without prejudice or disclaimer. Claims 5, 8-9, 12 and 47 are here amended. Support for the amendments to the claims can be found in claims as originally filed and as previously amended. No new matter is added.

Claim 5 as amended is directed to an isolated nucleic acid molecule comprising a fragment of at least 250 nucleotides of a nucleic acid consisting of the nucleotide sequence of SEQ ID NO:1 or 3, or a complement thereof. Such fragments are provided by the application at page 60, lines 2-7, and in claim 5 as originally filed.

With this amendment Applicants re-submit the Declarations of Drs. Geck and Szelei, which were previously sent to the U.S. Patent and Trademark Office as part of the Response dated May 17, 2004 (as evidenced by Applicants' postcard stating Declarations of Prior Inventors, 9 pages; and as evidenced by Applicants' Transmittal Letter indicating that the Declaration had 3 counterparts, 9 pages total).

Applicants reserve the right to prosecute claims that are the same or similar in scope to the canceled claims, in this or another application having the same priority date.

Claims are novel in view of Geck et al., J. Steroid Biochem. and Mol. Biol. 63:211-18, 1997

Claims 5-7, 9-11, and 47 were rejected in the Office Action of Dec. 17, 2003 on page 32-33, ¶ 24, as anticipated by Geck et al., J. Steroid Biochem. and Mol. Biol. 63:211-18, 1997.

Applicants traverse this rejection for the following reasons. Claims herein are directed to isolated nucleic acid molecules having sequences of SEQ ID NO:1 or SEQ ID NO: 3, as well as consisting of a fragment of at least 250 nucleotides of a nucleic acid comprising the nucleotide sequence of SEQ ID NO:1 or 3, or a complement thereof fragments of these sequences greater than 250 nucleotides in length, and vectors, isolated host cells, and kits containing these nucleic acids.

The standard of rejection for anticipation is identity. The 1997 Geck publication contains no sequence information. Rather, this reference at Table 1 (page 214) refers to a 262 base pair

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fragment of AS3 which may be only 98% identical to a nucleic acid deposited as Genbank accession number U50533. However as no sequence is disclosed in Geck 1997, the identity cannot be determined, let alone used by one of ordinary skill. GenBank Accession number U50533 corresponds to a human BRCA2 region on chromosome 13q12-13, and is an 1852 base pair nucleic acid without a disclosed open reading frame.

As the 1997 Geck publication does not disclose any nucleic acid or amino acid sequences, let alone the specific sequences the isolated nucleic acids of SEQ ID NO:1 or SEQ ID NO: 3, or any 250 bp fragments thereof, there is no way to determine from this reference the exact sequence of any 262 base pair fragments of a 1852 nucleotide sequence having an accession number, let alone which of the nucleotides are 2% different, let alone what those 2% differences are (transitions, transversions, or deletions or additions). Further, the 262 base pair piece could be any of about 1590 different fragments, starting at each nucleotide and sliding along the 1852 nucleotide sequence length.

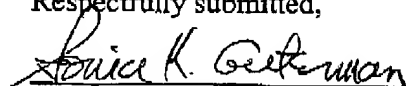
Further, the piece that is 98% homologous may have numerous additional counterparts throughout the genome, such as might be expected for a multitude of DNA binding proteins. Even if one of ordinary skill knew which piece it was, that mere knowledge would not render it identical to any of those numerous counterparts, let alone the nucleotide sequences of the pending claims as here amended. Therefore a 262 base pair fragment merely mentioned in prior art, with no disclosed nucleic acid sequence, is not the sequence of any of the claimed compositions. Therefore, pending claims 5-7, 9-11, and 47, as here amended, are not anticipated by the 1997 Geck publication.

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Conclusion

Based on the present amendments and remarks, Applicants submit that the present claims are in condition for allowance, and such action is respectfully requested. Should any questions or issues arise concerning the application, the Examiner is invited and encouraged to contact Applicants' attorney or agent at the telephone number below.

Respectfully submitted,



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